



Joint Legislative Audit Committee  
Office of the Auditor General



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## **CALIFORNIA'S POLICIES FOR EDUCATION OF GIFTED PUPILS NEED LEGISLATIVE REDEFINITION**

California's Mentally Gifted Minor (MGM) program provides funding for school districts to offer "qualitatively different" educational programs for gifted pupils. State funding for the program was approximately \$15 million in 1977-78.

Our review of MGM identified numerous problems including:

- Statutory enrollment limitations for the program have been exceeded, leading to per pupil funding below the legislatively prescribed minimum
- A principal eligibility criterion has been general intellectual ability, measured largely by performance on IQ tests. High-achieving pupils or those from culturally disadvantaged backgrounds may not have had the opportunity to participate
- A substantial number of already high revenue districts have received state funds for disproportionately large numbers of pupils. In addition, districts can receive overlapping state support under MGM and the School Improvement Program.

Due to these and other problems, we are recommending that the Legislature redefine policies for education of gifted pupils.

REPORT TO THE  
CALIFORNIA LEGISLATURE

REPORT OF THE  
OFFICE OF THE AUDITOR GENERAL

820

CALIFORNIA'S POLICIES FOR EDUCATION  
OF GIFTED PUPILS NEED LEGISLATIVE REDEFINITION

OCTOBER 1978



# Joint Legislative Audit Committee

OFFICE OF THE AUDITOR GENERAL

## California Legislature



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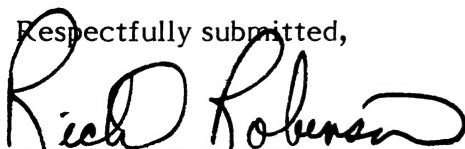
Members of the Legislature:

Your Joint Legislative Audit Committee respectfully submits the Auditor General's report on the Mentally Gifted Minor (MGM) Program. The program provides funding for school districts to offer "qualitatively different" educational programs for gifted pupils. State funding was approximately \$15 million in 1977-78.

The report identifies numerous problems in the MGM program. Statutory enrollment limitations have been exceeded, leading to per pupil funding below the legislatively prescribed minimum. A principal eligibility criterion has been general intellectual ability, measured largely by performance on IQ tests. High-achieving pupils or those from culturally disadvantaged backgrounds may not have had the opportunity to participate. A substantial number of already high revenue districts have received state support for disproportionately large numbers of pupils. In addition, districts can receive overlapping state support under MGM and the School Improvement Program. Due to these and other problems, the Auditor General is recommending that the Legislature redefine policies for education of gifted pupils in the State.

The auditors are Dr. Joan S. Bissell, Supervising Auditor; Eugene T. Potter, Senior Auditor; Jacques M. Barber, Assistant Auditor; and Edwin H. Shepherd, Associate Auditor. Support staff is Lucy Chin.

Respectfully submitted,

  
RICHARD ROBINSON  
Chairman

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## SUMMARY

California's Mentally Gifted Minor (MGM) program, enacted in 1961, provides funding for school districts to offer educational programs suited to the abilities of gifted pupils.

State funding for the program was approximately \$15 million in 1977-78. Slightly over 170,000 pupils in 348 school districts participated in the program.

Our review of the MGM program revealed that:

- Statutory enrollment limitations have been exceeded during each of the past several years (pp. 9-13)
- Identification of pupils eligible for the program cost over \$2.3 million of state and local funds in 1976-77. Local identification expenses have exceeded state funding by almost 100 percent, and school districts paid identification costs of over \$1 million with their own funds during 1976-77 alone (pp. 18-19)
- A principal eligibility criterion under present statutes is general intellectual ability which is frequently measured by performance on IQ tests. Statutory eligibility standards have been difficult

to implement. In addition, pupils who are high-achieving, talented in a variety of areas or from disadvantaged backgrounds and have not scored at the requisite level on IQ tests may not have the opportunity to participate in the program (pp. 13-18)

- Due to excessive enrollments in the MGM program, fiscal support levels have consistently been below the legislatively prescribed per pupil minimum (pp. 22-24)
- There are no provisions to equalize total MGM funding levels among districts. Thirty-six districts in the State had over 10 percent of their pupils enrolled in MGM during the most recent school year. Eighty-five percent of elementary districts in this group were in the upper 20 percent statewide in combined state and local guaranteed revenue (pp. 24-27)
- There are no provisions to adjust state MGM funding in relation to the funding which districts also receive through other categorical programs. In grades K through 3, 57 percent of students for whom districts received MGM funding in 1976-77 were pupils for whom School Improvement Program

funds were also received. Within the 21 elementary districts with over 10 percent MGM enrollment, the average funding overlap was 63 percent (pp. 28-29)

- The MGM program has operated separately from other categorical programs in the State. Consequently, a relatively large proportion of program funds has been expended to support administrative and other non-teaching expenses (pp. 31-36)
- The Department of Education has failed to perform adequate state-level evaluations of MGM or to provide consistent guidelines for local evaluations. The result is that information is not available to determine either the overall benefits of the MGM program or the efficacy of different program approaches for education of gifted pupils (pp. 38-41).

To address these problems, we recommend that the Legislature redefine California's policy for education of gifted pupils. In this process the Legislature should consider:

- What, if any, special identification of pupils as "gifted" should occur in California's public schools as a basis for providing unique opportunities to such pupils (pp. 20-21)

- If such special identification is appropriate, what criteria should be used and what can be done to ensure that such criteria are (a) fair to pupils from a range of backgrounds having a variety of talents and achievements and (b) cost-effective (pp. 20-21)
- What, if any, additional funding is warranted for special educational programs for gifted pupils and how should such funding fit into overall state policies regarding equitable school financing (pp. 29-30)
- Whether maintenance at the state and/or local levels of a separately administered program for gifted pupils is warranted, and what coordination is appropriate between programs for gifted pupils and other school programs (p. 37).

In addition, we recommend that in redefining long-term policies for education of gifted pupils in California, the Legislature designate an entity independent of the Department of Education to evaluate the effectiveness of alternative approaches in this area (p. 42). Finally, in view of the complex educational and policy issues associated with reviewing alternative approaches for education of gifted pupils, the Legislature may wish to consider establishing a special advisory committee on this matter.



## INTRODUCTION

In response to a resolution of the Joint Legislative Audit Committee, we have reviewed California's Mentally Gifted Minor (MGM) program. The review was conducted under the authority vested in the Auditor General by Government Code Section 10527.

This review provides information to the Legislature concerning:

- MGM participation, funding and expenditures
- Types of MGM programs and curriculum offerings
- Procedures used to identify MGM pupils
- Methods being implemented to reduce MGM enrollments in accordance with a 1976 Attorney General opinion.

It also addresses the following policy issues:

- The support provided by existing studies for the provision of unique programs for gifted pupils
- The nature of MGM program goals and objectives and their relationship to the goals of the School Improvement Program\* and other categorically funded programs in the State

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\*Established in 1977 to meet the individual needs of all pupils and preceded by the Early Childhood Education program enacted in 1972.

- Program effectiveness, including comparisons among different types of gifted programs.

### Mentally Gifted Minor Program

California's MGM program, initially authorized by Chapter 883, Statutes of 1961,\* provides funding for school districts to offer educational programs suited to the abilities of gifted students. Under program regulations, districts that choose to participate must provide activities which are "qualitatively different" from regular classes. These may be offered through a range of program options including, for example, placement in advanced grades or classes, supplemental activities within the regular classroom or special "pull-out" activities organized for gifted pupils.

Total state funding for the MGM program was approximately \$15 million in 1977-78. Slightly over 170,000 pupils in 348 school districts participated in the program.

### Scope and Methodology

In examining the MGM program we:

- Reviewed statistical information concerning MGM participation and funding from 1961-1962 to the present

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\*Present statutory authorization is under Chapter 8, Part 8, of the Education Code commencing with Section 42200.

- Examined financial characteristics of the 36 districts having over 10 percent enrollment in MGM
- Analyzed the degree of joint pupil participation in MGM and the School Improvement Program (SIP)
- Identified program offerings of 40 districts ranging in percentage of MGM enrollment
- Compared statewide budget and expenditure data for MGM with data for other education programs in the State
- Conducted site visits to schools in eight districts varying in district size, MGM enrollment,\* SIP participation\*\* and urban/suburban/rural status
- Analyzed College Entrance Examination Board test score data for MGM and non-MGM pupils
- Examined earlier studies concerning California's MGM program as well as the literature concerning programs for gifted and talented pupils nationally.

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\*Districts ranged from 1.6 percent to 21.2 percent district MGM participation.

\*\*Ten schools included in the review had SIP (or related school reform programs such as ESEA, Title IV-C Reform in Intermediate and Secondary Education pilot projects) in operation; 6 of these schools and 3 additional schools had SIP planning grants; 19 schools were not involved in SIP.

### Study Limitations

Statewide information about the MGM program contained within this report is based upon data provided by the Department of Education. Shortcomings in department data precluded our performing some analyses (e.g., comprehensive comparisons and aggregations between MGM and other programs). In addition, we rarely found two department figures on particular topics to be precisely in agreement. As a result, figures in the report should be viewed as close estimates which may not represent exact numbers in every instance.

Although this report does not include a review of legislation introduced during recent years to deal with concerns about the MGM program, it is noteworthy that there have been previous attempts by a variety of groups to address some of the fundamental problems in the MGM program which the report discusses (e.g., adjustments to ensure that funding levels would be consistent with those authorized in law). Various pieces of proposed legislation have been supported by the State Board of Education, school districts and parents of gifted children. Some were passed by the Legislature but subsequently vetoed by the Governor.

## AUDIT RESULTS

### IDENTIFICATION OF MGM PUPILS: OVER-ENROLLMENTS, QUESTIONABLE CRITERIA AND HIGH COSTS

Enrollments in the MGM program have exceeded statutory limitations during each of the past several years. Identification of pupils eligible for the program cost over \$2.3 million in 1976-77, the most recent year for which complete figures are available. Scores on tests designed to measure general intellectual ability (IQ tests) have been a principal method of identifying participants under present law. The existing statutory mandate is difficult to implement for a number of reasons. Pupils who are high-achieving, talented in a variety of areas or are from disadvantaged backgrounds and yet have not scored at the requisite level on an IQ test may not have the opportunity to participate in the program.

#### Over-enrollments

The Education Code defines pupils as eligible for participation in the MGM program if they (a) are in the top two percent statewide by grade level as measured by a general test of intellectual ability or (b) are identified through special "committee judgement" or "culturally disadvantaged" criteria.

The Code limits state funding to three percent\* of K-12 students statewide based upon all categories of eligibility. Table 1 summarizes statewide participation in the MGM program since 1974-75 and demonstrates the problem of MGM over-enrollment. MGM enrollments have consistently exceeded the statutory funding maximum of three percent during recent years.

TABLE 1

TOTAL STATEWIDE PARTICIPATION IN  
MENTALLY GIFTED MINOR PROGRAM BY YEAR

<u>School Year</u>	<u>Number of Participating School Districts†</u>	<u>Number of Participating Students†</u>	<u>% of Statewide Student Population</u>
1974-75	300	188,653	4.26
1975-76	326	188,540	4.27
1976-77	337	187,186	4.27
1977-78	348	170,881	3.97
1978-79 (Projected)	351	159,347	3.73

†Data provided by State Department of Education

Reasons for the excessive enrollments in the MGM program have included (a) fiscal incentives for maximum pupil identification (e.g., districts are reimbursed for identification

\*The MGM enrollment limitation was originally two percent. However, a funding maximum of three percent was established in 1972, subsequent to the 1968 addition of alternative identification criteria. The three percent maximum is based on average daily attendance for the preceding fiscal year.

only if pupils are determined to be eligible for the program),  
(b) the previous absence of district enrollment limitations and  
(c) technical difficulties resulting from the use of IQ test norms.

The effect of over-enrollments has been to reduce per pupil allocations below statutory minimums, an issue discussed in more detail on pages 22 to 24 of this report.

Although the State Board of Education is required by law to prescribe procedures for pupil identification, the Department of Education did not limit enrollments until a 1976 Attorney General opinion required a reduction in participating pupils in accordance with statutory maximums.

The State Board of Education took corrective action to deal with the problem of over-enrollments in December 1976.\* We found considerable variation among districts in the extent to which total program enrollments have been reduced as a result of the Board's action. For example, some districts that had previously supported the program partially with district funds were maintaining enrollments at the same level; funds that had previously been used for general MGM program support were designated for pupils in excess of those eligible for state funding. In contrast, other districts which did not have such resources were reducing enrollments

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\*The policy adopted by the Board was to require districts statewide to reduce enrollments by 6.75 percent each year over a four-year period to achieve the required 27 percent reduction. Special exceptions were granted for some districts (e.g., those having 50 or less pupils in their MGM programs).

annually (such variations are permissible since the Attorney General opinion and the State Board of Education policy only require reductions in state-supported enrollments).

Procedures being used by some districts to implement required reductions appear to compound a second problem related to statutory MGM enrollments. A number of districts are reducing enrollments by completely eliminating programs at certain grades--typically the early elementary grades or grade 12--while maintaining full program enrollments at other grade levels. The Education Code, however, specifies that the program is limited to pupils at the top two percent statewide of intellectual ability at their grade level. In January 1978, the Attorney General ruled that to conform with this provision, the State Board of Education must prescribe criteria which ensure that not more than two percent of the pupils in each grade (K-12) are identified as mentally gifted minors. A pattern of districts consistently eliminating programs at certain grade levels may make it difficult to adhere to this standard.

Another problem concerning the statutory enrollment limitation is that at this time there is no general intelligence test that is administered to every pupil in the State and limits on the use of general intelligence testing have been specified by the Legislature. Consequently, there is no way to determine with certainty whether a participant pupil is within the top two percent of the pupils statewide at his grade level.



In the January 1978 opinion, the Attorney General recognized the difficulty of developing a workable policy in this area and observed that "This entire subject is a matter that deserves legislative consideration."

#### Questionable Criteria

Another problem concerns the variation among districts in use of criteria other than IQ tests to identify culturally disadvantaged pupils as gifted. Alternative eligibility criteria were authorized by the Legislature in 1968\* to enable districts to enroll a pupil in the program who ". . . for reasons associated with cultural disadvantages has underachieved scholastically."

The legislative intent was expressed as follows:

It is the intent and purpose of the Legislature to provide for the identification and inclusion of mentally gifted minors of culturally disadvantaged backgrounds in the special educational programs for mentally gifted children.

The legislation further specified that the general intellectual ability of a minor determined to be culturally disadvantaged shall not be evidenced solely by scores on tests measuring intellectual ability or aptitude. However, there is considerable variation among districts in the use of eligibility criteria other than IQ tests for pupil identification. Some districts report using alternative criteria (e.g., the "culturally

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\*Chapter 1339, Statutes of 1968.

disadvantaged" or "committee judgement" criteria) to the maximum extent allowable under administrative regulations, while others reportedly do not use them at all.

One reason alternative identification criteria have not been consistently used is that the Department of Education has not required that all districts utilize them on a consistent basis throughout the State. While the Department has encouraged districts to adopt them, the extent of the actual usage of alternative criteria has been partially a matter of local determination. Therefore, culturally disadvantaged pupils may not have equal opportunities to participate in the program in all districts.

A related issue pertaining to the present statutory definition of MGM eligibility is the effect of intelligence testing on selection of pupils for program participation. Students may be talented or high-achieving in one or more areas but not score at the specified IQ test level (e.g., a score of 132) used as a principal criterion for MGM identification.\*

\*Department of Education guidelines specify that:

The identification of gifted pupils is based upon the professional review of all pertinent evidence as to the pupil's general intellectual and scholastic capacity by an identification and placement committee. No single test, test score, or other measurement shall be the determining factor in the process.

It is the present statutory definition of MGM eligibility that serves to emphasize general intellectual ability (e.g., as measured by IQ tests) as a principal criterion for determining eligible pupils in this process.

A number of states as well as the Federal Government\* have defined gifted and talented pupils based upon a broader set of eligibility standards (e.g., demonstrated achievement or talent in a variety of areas) than that of measured "general intellectual ability" (IQ) which is principally used in California.

To assess the validity of the State's present method for selecting pupils for participation in the MGM program, we reviewed the technical characteristics of IQ tests and analyzed College Entrance Examination Board (CEEB) Advanced Placement test scores\*\* for MGM and non-MGM pupils.

We found that:

- IQ tests may be of limited reliability for making the type of distinctions presently involved in determining pupil eligibility for MGM (e.g.,

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\*An example of a broader definition is the following federal specification:

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. General intellectual ability
2. Specific academic aptitude
3. Creative or productive thinking
4. Leadership ability
5. Visual and performing arts
6. Psychomotor ability

\*\*Advanced Placement is a program of college-level course work and exams for secondary school students. Its goal is:

. . . to help meet the needs of a secondary school's able, ambitious, and talented students by providing them with stimulating and demanding college-level instruction in one or more of 13 subjects . . . (examinations in additional subjects are presently being developed).

In 1976, 419 secondary schools in California participated in the Advanced Placement program.

frequently distinctions of a few points), particularly at the early grade levels in which the majority of testing for the MGM program occurs

- IQ tests used by schools to measure general intellectual ability may not identify pupils having high aptitude in a variety of particular areas (e.g., mechanical or spatial aptitude, musical or artistic talent, various creative abilities)
- A substantial number of pupils who did not qualify for participation in the MGM program\* (frequently because they did not score at the requisite level on an IQ test) have demonstrated high levels of secondary school achievement--levels which are so high as to qualify them for advanced standing upon college entrance.

This last conclusion is based on our analysis of Advanced Placement (AP) test scores for pupils in MGM districts who did not qualify for the MGM program. The results of this analysis are presented in Table 2.

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\*Interviews with district personnel indicated that pupils not in MGM for the most part had not qualified for the program; very few had qualified but had chosen not to participate.

TABLE 2

COLLEGE ENTRANCE EXAMINATION BOARD  
ADVANCED PLACEMENT SCORES, 1977†

<u>Score</u>	<u>MGM Pupils</u>		<u>Non-MGM Pupils</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Passing (3 or above)††	2,925	83.3	1,811	70.1
Not Passing (2 or less)	<u>587</u>	<u>16.7</u>	<u>771</u>	<u>29.9</u>
Total	<u>3,512</u>	<u>100.0</u>	<u>2,582</u>	<u>100.0</u>

†Based on a sample of 29 MGM districts representing over 43 percent of the statewide participation in the Advanced Placement program.

††Analysis of scores in relation to the two categories in the table was based upon information provided by the Advanced Placement program indicating that students generally earn college credit by obtaining a score of 3 or above on CEEB Advanced Placement examinations.

The data show that although pupils who participated in MGM scored higher on the average than pupils who did not, 70.1 percent of scores of non-MGM pupils who chose to participate in the Advanced Placement program were at levels qualifying them for advanced standing in college.

A detailed breakdown of Advanced Placement test scores for MGM and non-MGM pupils is presented by subject area in Appendix B (Table B-1). The data show that although MGM pupils scored higher than non-MGM pupils on all tests,\* on 8 out of 13 tests at least 75 percent of non-MGM pupils achieved AP test scores which enabled them to participate in advanced level college

\*Comparisons between Advanced Placement scores of MGM and non-MGM pupils cannot be used to judge the effectiveness of the MGM program due to the initial differences in measured ability between the two groups of pupils.

work. Among the subjects in which pupils who did not qualify for MGM achieved particularly well were mathematics, physics, chemistry, art, music and Spanish.

Our analysis demonstrates that many high-achieving pupils who can benefit from advanced learning opportunities have not qualified for the MGM program. This pattern results from heavy reliance on IQ testing as a principal criterion for MGM pupil identification in accordance with the present statutory definition of eligibility.

#### High Identification Costs

MGM pupil identification procedures required under the present statutory definition of eligibility are quite costly. State and local expenditures for MGM identification in 1976-77 are shown in Table 3.\*

TABLE 3

#### STATEWIDE MGM IDENTIFICATION COSTS, 1976-77

<u>Source of Funds</u>	<u>Amount</u>	<u>Percentage</u>
State Allowance	\$1,190,686	51
District Expenditure	<u>1,140,918</u>	<u>49</u>
Total	<u>\$2,331,604</u>	<u>100</u>

\*These are reported statewide costs for 1976-77, the most recent year for which complete figures are available.

The figures show that total state and local costs for MGM pupil identification were over \$2.3 million in 1976-77. Expenses exceeded state funding by almost 100 percent, and districts paid identification costs of over \$1 million with their own funds.

The student assessment process for MGM is to include a developmental case study, the required components of which are: (a) a teacher screening and nominating form, (b) a psychologist's evaluation and summary, (c) the findings of an identification and placement committee, (d) a signed and dated parental consent form and (e) an annual review statement of pupil progress. Information gathered during the case study is intended to contribute to diagnosis and planning for individualized instruction.

Reasons for high costs of this identification process include (a) the expense of IQ testing requiring a trained psychologist, and (b) inefficiencies resulting from substantially more pupils being referred for testing than are actually identified.\* Without pre-screening of pupils--which may serve to exclude students from disadvantaged backgrounds--substantially more pupils may be tested than are actually found to be eligible for the program.

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\*A study in one district indicated that for every 100 students referred for evaluation as potential MGM pupils, only 23 were identified as gifted. However, the study also reported that some schools are able to perform identification considerably more efficiently than others.

## CONCLUSION

We found numerous problems in the procedures used to identify pupils eligible for participation in California's MGM program and in the statutes governing such identification. These problems relate to program over-enrollments, questionable validity of identification processes which may be based largely upon IQ tests and high costs associated with present procedures for pupil identification.

## RECOMMENDATION

We recommend that the Legislature redefine the State's policy for identifying "gifted" pupils. The Legislature should consider in this process:

- What, if any, special identification of pupils as "gifted" should occur in California's public schools as a basis for providing unique opportunities to such pupils
- If such special identification is warranted, what criteria should be used and what can be done to ensure that such criteria are (a) fair to pupils from a range of backgrounds having a variety of talents and achievements and (b) cost-effective.



In view of the complex issues related to these matters, the Legislature may wish to establish a committee composed of educators, scholars and a range of other individuals to advise in this area.

MGM FUNDING: FAILURE TO MAINTAIN  
REQUIRED SUPPORT LEVELS, DISPARITIES  
IN FUNDING TO DISTRICTS AND OVERLAP  
WITH SCHOOL IMPROVEMENT PROGRAM

We identified several problems concerning MGM funding: per pupil program funding levels have consistently been below the statutory minimum, no provisions exist to establish equitable total funding among districts and state funding for MGM and the School Improvement Program has overlapped.

Failure to Maintain  
Required Support Levels

The Education Code establishes certain minimum levels of per pupil support for the MGM program: during the past several years, these levels have been \$50 for pupil identification and \$100 for program activities. Statutory and actual per pupil funding levels are shown in Table 4 on page 23.

The data in Table 4 show that during each of the past several years, per pupil MGM funding levels have been below those prescribed by the Education Code. This is despite the fact that the Code specifies that the Superintendent of Public Instruction ". . . shall apportion to each applicant school district . . ." an amount equal to the statutorily designated levels. Per pupil apportionments have been lower than required by law because MGM

TABLE 4

STATE MENTALLY GIFTED MINOR PROGRAM:  
STATUTORY AND ACTUAL ALLOCATIONS

School Year	Pupil Identification			Program Activities		
	Statutory Allocation Per Pupil	Actual Funding Per Pupil	Percent of Statutory Allocation Per Pupil	Statutory Allocation Per Pupil	Actual Funding Per Pupil	Percent of Statutory Allocation Per Pupil
1974-75	\$50	\$38.39	76.8	\$ 90	\$76.77	85.3
1975-76	50	40.26	80.5	100	80.53	80.5
1976-77	50	39.82	79.6	100	79.64	79.6
1977-78	50	44.01	88.0	100	88.02	88.0
1978-79+ (projected)	50	39.25	78.5	100	78.51	78.5

+The decrease from 1977-78 to 1978-79 reflects the ten percent reduction in MGM funding (and other categorical program funding) enacted by the Legislature through Chapter 292, Statutes of 1978 (SB 154).

program funding has been prorated to support excessive numbers of pupils participating in the program as discussed on pages 9 to 11 of this report.

According to the Attorney General, the Superintendent is not authorized to prorate such apportionments to school districts at a level lower than the per pupil dollar amounts specified in the Education Code. In the Attorney General's opinion, the prorating of apportionments violates the legislative intent of ensuring: ". . . a financial commitment by the state . . . to maintain a . . . minimum level of quality with respect to such programs."

#### Disparities in Funding

A second problem relating to MGM funding concerns the inequity in total state support among districts. The California Supreme Court has ruled that substantial disparities in revenues between school districts are unconstitutional because:

. . . equality of educational opportunity requires that all school districts possess an equal ability in terms of revenue to provide students with substantially equal opportunities for learning. (Serrano 11, 18 Cal. 3d 728, 747-749)\*

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\*While the Serrano court ruling excluded categorical funding, the State's policies in addressing issues of school financing could include these funds.

Although the court opinion was not directed toward the MGM program, it does raise questions concerning the large variation in total state MGM revenues received by districts. While high enrollments and state support are found in some districts, many others may have enrollments of two percent or less and may receive relatively little total state funding. No provisions exist under current law to equalize total MGM funding among districts.

Table 5 on page 26 shows the 36 districts that receive state MGM funding for 10 percent or more of their enrollment.

Of the 21 elementary schools receiving state MGM funding for 10 percent or more of their enrollment, 18 were above the 80th percentile statewide in guaranteed revenue limit,\* the indicator of school district general fund revenues (combined state and local) pursuant to Chapter 292, Statutes of 1978 (SB 154). Although the pattern was not as marked in unified districts, those receiving over 10 percent apportionments again had higher-than-average guaranteed revenues (i.e., noncategorical state and local support).

This pattern results because current law does not limit maximum district enrollments in the program or consider financial characteristics of districts in apportioning MGM funds.

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\*Guaranteed revenue limit per average daily attendance.

TABLE 5

SCHOOL DISTRICTS WITH PARTICIPATION  
OF 10 PERCENT OR OVER IN MGM PROGRAM, 1976-77†

<u>School District</u>	<u>Percent District Participation in MGM</u>
1. Orinda Union Elementary	42.00
2. Los Altos Elementary	25.18
3. Moraga Elementary	23.44
4. Mill Valley Elementary	22.79
5. Berkeley Unified	19.25
6. Palo Alto Unified	19.16
7. Hillsborough Elementary	18.86
8. Los Gatos Elementary	17.98
9. Lafayette Elementary	17.55
10. Lowell Joint Elementary	16.95
11. Woodside Elementary	16.89
12. Cupertino Unified	16.54
13. Saratoga Elementary	15.31
14. Walnut Creek Elementary	15.31
15. San Marino Elementary	14.81
16. Piedmont City Unified	14.43
17. San Carlos Elementary	14.29
18. Belmont Elementary	14.21
19. Los Lomitas Elementary	14.14
20. Kentfield Elementary	13.38
21. Castro Valley Unified	13.25
22. Menlo Park Elementary	13.09
23. Reed Union Elementary	12.90
24. Palos Verdes Unified	12.80
25. Laguna Beach Unified	12.46
26. Acalanes Union High	11.85
27. Scotts Valley Elementary	11.83
28. Sunnyvale Elementary	11.05
29. San Gabriel Elementary	10.97
30. South Pasadena Unified	10.97
31. Albany Unified	10.47
32. Coronado Unified	10.43
33. San Juan Unified	10.43
34. Pasadena Unified	10.31
35. Redwood City Unified	10.21
36. Lincoln Unified††	10.02

†Source: State Department of Education MGM program applications.

††San Joaquin County

It is also noteworthy that district MGM participation is voluntary, and only about one-third have chosen to enter the program (representing, however, approximately 90 percent of the statewide K-12 population). As indicated in an earlier study:\*

. . . the relationship between the incidence of gifted programs and the size of the school districts is dramatic. There were 555 school districts in California with pupil populations under 900 and only eight (less than 2%) of these districts offered state funded gifted programs. In contrast, 30% of the school districts with pupil populations between 900 and 5,000 provided gifted programs. The incidence of programs for the gifted climbed to 63% for districts with school populations between 5,000 and 10,000. The highest rate, 70% or more, occurred in those districts with . . . student populations over 10,000.

The relationship between district size and a child's opportunity to participate in a gifted program was clearly evident. If the pupil was enrolled in a small school district the odds were considerably less than 1 in 10 that there was an available program. If the pupil was to move through a sequence of districts of increasingly larger size, the odds would progressively increase from 3 in 10, to 6 in 10, and finally to 7 in 10.

Reasons cited by superintendents of small districts for not participating in the program include the high costs for administering the program in relation to the relatively small amount of program funds that would be received.

The pattern of uneven district participation leads to unequal opportunities for pupils to participate in a gifted program.

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\*Programs and Issues: Mentally Gifted Minors in California, University of California; Research in Special Education, 1973.

### Overlap With School Improvement Program

Under present law, MGM funding to districts is not reduced in relation to SIP funding, and overlapping state support can be received for the two programs. In contrast, in another case of potential duplicate funding--that between SIP and the Miller-Unruh Basic Reading Program (for low achieving students)--the Legislature has specified that SIP apportionments to districts are to be reduced by the amount of funds the district receives through participation in Miller-Unruh (Education Code, Section 52045).\*

In examining funding for MGM and SIP, we found that in grades K through 3 (the grade levels in which SIP programs were implemented through 1977-78), 54 percent of pupils for whom districts received MGM funding were those for whom districts also received funding for an individualized program for all pupils under SIP. Within the 21 elementary districts having over 10 percent MGM enrollment, the average overlap was 63 percent. This overlap results because under present law district MGM funding is not adjusted in accordance with funding for SIP.

Consequently, in 1977-78 the State appropriated a substantial proportion of MGM funds in grades K-3 for pupils for whom an individualized program was being funded under SIP. With

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\*Consideration of various sources of categorical funding in determining state support to districts under particular programs has been a policy enacted by the Legislature for compensatory education and bilingual education generally (Education Code, Sections 54024 and 52168).



an increase in the magnitude of participation and state funding for SIP projected over the next several years, the amount of duplicate funding will increase considerably.

#### CONCLUSION

Per pupil funding for MGM has been below statutory minimums during the past several years. In addition, state funding for the program has had a disequalizing effect, with some districts receiving disproportionately large total revenues; many of these are otherwise high revenue districts. Furthermore, under present law districts can receive overlapping state support for pupils under MGM and the School Improvement Program.

#### RECOMMENDATION

We recommend that the Legislature redefine funding policies for the education of gifted pupils in California. Among issues needing attention are:

- What if any additional funding is warranted for special educational programs for gifted pupils
- If such funding is warranted, what procedures should be adopted to ensure that monies appropriated for gifted pupils are distributed equitably among districts

- What should be the relationship between any special appropriations for gifted pupils and funding for other categorical education programs (e.g., should districts receive both MGM and SIP funding for individual pupils?).

MAINTENANCE OF A SEPARATE MGM PROGRAM:  
LOW FUNDING FOR DIRECT INSTRUCTIONAL  
PURPOSES AND LACK OF COORDINATION WITH  
OTHER PROGRAMS AT THE STATE AND LOCAL  
LEVELS

The MGM program is one of the few categorical education programs in California which continues to be separately funded and administered. This separate administration has been associated with relatively high expenditures for purposes other than direct instruction and a lack of coordination between MGM and other education programs at both the state and local levels.

Low Funding for Direct  
Instructional Purposes

Most categorically funded education programs in the State (a) are funded and administered through the Department of Education's consolidated application and management process which includes the School Improvement Program, a number of state and federal compensatory education programs for disadvantaged pupils and bilingual education programs, or (b) are funded directly through the state apportionment process (e.g., a variety of special programs for handicapped pupils).

The MGM program is funded and administered basically independent of other education programs. Analyses of MGM program expenditures in comparison with those of other special education programs (e.g., for handicapped pupils) presented in Table 6 (see page 33)

reflect the expenditure pattern which has occurred under this policy. Additional data which compare MGM expenditures with those of other categorically funded programs in the State are presented in Appendix A (Table A-1, Chart A-1).

The data in Table 6 and Appendix A show that in comparison with other education programs and with K-12 education expenditures generally, a relatively low proportion of MGM funds support instructional salaries and a relatively high proportion go for such support categories as administration, pupil personnel services and books, supplies and equipment (the latter generally being restricted to use for MGM classes).

The relatively high proportion of MGM expenditures in noninstructional categories is partially accounted for by the administrative activities required in relation to the program's size. Among the requirements are a separate program application for MGM funding and annual program evaluations of pupil progress and program administration by participant districts. Additional factors explaining the pattern of expenditures are (a) the costs associated with identifying eligible pupils (as discussed earlier) and (b) the frequent practice of maintaining separate materials and resource libraries for MGM activities.

TABLE 6

PERCENT OF EXPENDITURES BY CATEGORIES,  
MGM AND OTHER SPECIAL EDUCATION PROGRAMS  
STATEWIDE DATA, 1976-77

	<u>Percent of Expenditures</u>	
	<u>MGM</u>	<u>Other Special Education Programs†</u>
<u>Direct Costs</u>		
Certificated Salaries	35.0	49.4
Classified Salaries	4.6	7.3
Employee Benefits	4.9	8.1
Books, Supplies & Equipment	12.1	1.7
Contracted & Other Services	5.6	3.1
Capital Outlay	<u>2.3</u>	<u>.3</u>
Total Direct Costs	<u>64.5</u>	<u>69.9</u>
<u>Direct Support</u>		
Instructional Administration		
Media & School Administration	15.2	6.9
Pupil Services	10.1	7.2
General Support	<u>6.1</u>	<u>7.1</u>
Total Direct Support	<u>31.4</u>	<u>21.2</u>
<u>Indirect Support</u>		
Current Expenses	3.9	8.8
Capital Outlay	<u>.2</u>	<u>.1</u>
Total Indirect Support	<u>4.1</u>	<u>8.9</u>
TOTAL EXPENDITURES	<u>100.0</u>	<u>100.0</u>

†Programs for handicapped pupils (e.g., educationally handicapped, visually impaired, speech handicapped).

The present funding situation is characterized by the addition of district resources to support program operations. Table 7 shows state and local funding for MGM as reported by the Department of Education.

TABLE 7

FUNDING FOR MGM PROGRAM ACTIVITIES†

<u>School Year</u>	<u>State Funding</u>	<u>District Funding</u>	<u>Total Funding</u>	<u>% District Contribution</u>
1974-75	\$13,690,625	Unknown††	Unknown	Unknown
1975-76	15,676,969	\$4,885,505	\$20,562,474	24
1976-77	15,346,363	4,561,338	19,967,701	23
1977-78	14,981,311	5,580,568	20,561,879	27
1978-79 (Projected)	13,373,550	5,600,000	18,973,550	30

†Data supplied by Department of Education. Information available through other sources suggest the figures for district support may be underestimates.

††Data not reported.

Lack of Coordination

A second problem associated with maintaining a separate MGM program concerns the lack of coordination between MGM and other programs at the state and local levels. Issues associated with this separate administration of the MGM program are illustrated in the following examples:

- Staff development has been identified repeatedly as a high priority in education of gifted pupils (including, for example, in the report of the Blue Ribbon Committee for Education of the Gifted established by the Superintendent of Public Instruction in 1976). Needs identified have concerned training regular classroom teachers and staff to work with gifted pupils as well as specialized teacher preparation for teachers of the gifted. Various programs in the State that include staff development components have generally not directed attention to these areas. A project aimed at developing teaching competencies for education of gifted and talented pupils has been undertaken through a federal grant under the Department of Education's Gifted and Talented Education Management Team.\* However, the project has been focused upon MGM teachers and it has not been coordinated systematically with staff development activities serving teachers generally which have been supported through various education programs in the State
- MGM accounting and record-keeping systems at the state level are largely separate from those for other education programs. Comprehensive data are not

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\*The project has been funded under Section 404 of Public Law 93-380, a federal program of grants and projects to support the education of gifted and talented pupils.

available on an ongoing basis concerning overlap in enrollments and funding between MGM and other programs at the state or local levels; application processes, accounting procedures and evaluation requirements differ between MGM and other programs. Separate data systems make it difficult to perform cross-program comparisons between MGM and other programs.

To some extent, problems related to separate program administration are attributable to the previous statutory requirement that the Department of Education have MGM management personnel ". . . who shall devote their entire time" to the MGM program. Administrative regulations requiring that local MGM programs be "qualitatively different from the regular school program"\* partially account for a lack of coordination between MGM and other programs at the local level.

This program separation limits potential economies associated with coordination between MGM and other programs in such areas as staff training, curriculum development and sharing of instructional materials. At the state level, a separately administered MGM program leads to an absence of information needed to compare program benefits as a basis for establishing priorities and allocating resources among programs.

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\*California Administrative Code, Section 3831(d).



## CONCLUSION

Separate administration of the MGM program represents a policy which is not found for most other education programs in California. The policy has resulted in a relatively low proportion of program resources devoted to direct instructional purposes and an absence of coordination between MGM and other programs at the state and local levels.

## RECOMMENDATION

We recommend that the Legislature reconsider the policy of maintaining a separately funded and administered program for education of gifted pupils. In the re-examination of policies in this area, legislative consideration should be given to:

- Whether maintenance of a separately funded and administered program for gifted pupils is warranted
- The coordination which is desirable between programs for gifted pupils and other school programs, and how such coordination can best be achieved.

DEFICIENT DEPARTMENT OF  
EDUCATION EVALUATION PROCEDURES  
FOR THE MGM PROGRAM

The Department of Education has failed to perform adequate state-level evaluations of the MGM program and to provide consistent guidelines for local evaluations. The result is that information is not available to determine either the overall benefits of the MGM program or the relative effectiveness of different program approaches. Evaluation techniques exist which could be used to systematically evaluate the program.

Districts are required under administrative regulations to perform annual evaluations of pupil progress and program administration for MGM programs.\* In 1975, the Legislature required the Department of Education to conduct a statewide evaluation of MGM.\*\*

Although the Department requires that each participating district perform an annual evaluation of pupil progress and program administration, it has not provided systematic guidelines for district use. The district evaluations we analyzed generally contained methodological limitations and did not provide a basis

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\*California Administrative Code, Title 5, Section 3831 (e) (5).

\*\*Supplemental Language to the 1976-77 Budget Act.

for generating valid conclusions about program effectiveness. In addition, evaluations conducted in one district typically cannot be compared or aggregated with those performed in another.

Also, the statewide evaluation report prepared by the Department in 1976 (in response to the 1975 legislative directive) was inadequate for measuring program effectiveness. It did not provide data concerning performance of MGM pupils in relation to a meaningful standard of comparison or based upon measures sufficient for judging program benefits.

Since evaluations have been inadequate, data are not available to judge the overall effectiveness of the MGM program. Neither is information available to determine the relative benefits of alternative approaches for educating gifted students as a basis for program management and improvement.

In examining the causes for deficient Department of Education evaluation procedures, we wished to determine whether methods exist which could be used to evaluate programs for gifted pupils. We therefore conducted a small-scale study including five schools in districts not in the MGM program and a group of similar MGM schools,\* all of which participated in the College Entrance Examination Board Advanced Placement program. For each school, data were collected on (a) the Scholastic Aptitude Test (SAT) verbal

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\* MGM schools were matched with non-MGM schools on the basis of socio-economic status and scores on statewide achievement tests.

and mathematics exams and (b) the Advanced Placement English and American History examinations. Pupils were matched on the basis of IQ category and SAT verbal and math aptitude scores, and an analysis of Advanced Placement examination scores was conducted which yielded the results presented in Tables 8 and 9 on page 41.

Due to the small sample included in our study and to a number of other factors (e.g., MGM scores do not reflect a representative sample of MGM pupils statewide;\* we did not have control over various external influences) these data cannot be used to draw inferences concerning performance of MGM pupils or effects of the MGM program. However, in conjunction with our review of other studies and our interviews with a range of individuals knowledgeable about educational evaluation, our work indicates that systematic evaluations of programs for gifted pupils can be performed. Such studies can be used to identify patterns of pupil performance associated with participation in various types of programs for gifted students as a basis for monitoring program implementation and analyzing program alternatives. A principal reason that such evaluations have not been conducted is that the Department of Education has failed to provide necessary direction in this area.

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\*The scores in Tables 8 and 9 for MGM pupils are lower than the large-sample Advanced Placement test scores for MGM pupils contained in Table B-1, due to the methodology of using MGM schools and pupils in the present analysis that were matched (on student body characteristics and aptitude scores, respectively) with non-MGM schools and pupils (in non-MGM schools).

METHODOLOGY DEMONSTRATING FEASIBILITY OF EVALUATING  
PROGRAMS FOR GIFTED PUPILS<sup>†</sup>

TABLE 8<sup>††</sup>

ADVANCED PLACEMENT SCORES: ENGLISH

<u>Test Score</u>	<u>MGM SCHOOLS</u>		<u>MATCHED NON-MGM SCHOOLS</u>		<u>Test Score</u>	<u>MGM SCHOOLS</u>		<u>MATCHED NON-MGM SCHOOLS</u>		<u>ADVANCED PLACEMENT SCORES: HISTORY</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Matched Pupils IQ 132 and Over</u>	<u>Matched Pupils IQ--Under 132</u>
Passing (3+) *	31	81.6	34	89.5	Passing (3+)	22	61.1	31	86.1		
Not Passing (2-)**	7	18.4	4	10.5	Not Passing (2-)	14	38.9	5	13.9		
Total	38	100.0	38	100.0	Total	36	100.0	36	100.0		
<u>Test Score</u>	<u>Non-MGM Pupils</u>		<u>Matched Pupils IQ--Under 132</u>		<u>Test Score</u>	<u>Non-MGM Pupils</u>		<u>Matched Pupils IQ--Under 132</u>			
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>		
Passing (3+)	34	52.3	46	70.8	Passing (3+)	53	67.9	33	42.3		
Not Passing (2-)	31	47.7	19	29.2	Not Passing (2-)	25	32.1	45	57.7		
Total	65	100.0	65	100.0	Total	78	100.0	78	100.0		

<sup>†</sup>Data are not intended as a basis for assessing performance of MGM pupils or evaluating the MGM program but rather to demonstrate a technique for evaluating programs for gifted pupils.

<sup>††</sup>SAT scores of MGM pupils and pupils of IQ 132+ (in non-MGM schools) averaged 61.5 and 61 on the verbal test and 64.5 and 64 respectively on the mathematics test; scores of non-MGM pupils (in MGM schools) and those having IQs of under 132 (in non-MGM schools) averaged 53 and 53.5 respectively on the verbal test and 56 on the mathematics test.

\*A score of 3 or more.

\*\*A score of less than two.

## CONCLUSION

Evaluations of the MGM program have not been sufficient to provide information needed for judging program benefits. Procedures do exist which could be used to measure both overall program effectiveness and the benefits of alternative approaches for educating gifted pupils.

## RECOMMENDATION

We recommend that as part of a long-term strategy for examining alternative approaches for education of gifted pupils in California, the Legislature designate an entity independent of the Department of Education to evaluate such programs.\* This independent entity could perform an overall statewide evaluation to measure the benefits of various approaches for educating gifted pupils and might also assist in establishing local evaluation guidelines.

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\*This could be done either through an independent evaluation organization or through one of the existing state bodies capable of performing evaluations. It would be consistent with the policy the Legislature has adopted for evaluation of other education programs in the State.

ADDITIONAL INFORMATION  
REQUESTED BY THE LEGISLATURE

OBJECTIVES OF THE MGM PROGRAM

The Education Code does not contain clear goals and objectives for the MGM program but rather states that it is to provide opportunities suited to the abilities of mentally gifted minors (Section 52202). Administrative regulations do not specify particular objectives although they do indicate that (a) local programs are to be qualitatively different from the district's other school programs and (b) written district plans must indicate the purposes of local programs, including the general and specific goals which pupils are expected to achieve. (California Administrative Code, Title 5, Section 3831.)

Objectives for gifted programs recommended in Department of Education program guidelines and commonly implemented at the local level are in the following areas: (a) academic achievement, (b) problem solving, (c) creativity, (d) leadership, (e) self-esteem, (f) communication, (g) career awareness, (h) aesthetic awareness and (i) peer relationship.

We attempted to determine the degree of similarity between the goals and objectives of the MGM program, SIP and other categorically funded programs. The SIP legislation specifies the following program objectives, some of which are also included in whole or part in other state or federal programs:

- Increase proficiency in basic skills of reading, language and mathematics
- Develop skills, knowledge and awareness in other areas of the curriculum such as arts and humanities; physical, natural and social sciences; consumer economics; career education; and physical, emotional and mental health
- Assist pupils to develop esteem of self and others, personal and social responsibility, critical thinking and independent judgement
- Provide a range of alternatives in instructional settings and formats to respond adequately to "the different ways individual pupils learn."

We found that it was impossible to judge definitively the overall similarity between the objectives of MGM and various other programs. Specific findings included:

- In some schools and districts, MGM objectives are characterized by attention to higher levels of academic attainment (e.g., objectives are focused on student achievement above the 75th percentile) and to development of a variety of abilities (e.g., critical thinking, creative skills, research methods, use of logic, expository writing) that may not be addressed in detail in other programs



- In other schools and districts, some objectives overlap; this is generally in broad program goals for particular curriculum areas rather than in specific objectives
- The degree of similarity in objectives differs among districts in relation to such factors as pupil characteristics (e.g., the variation among students in performance levels), making it difficult to provide accurate statewide generalizations in this area.

#### MGM AND RELATED PROGRAM OPTIONS

Under MGM administrative regulations, districts must provide at least 200 minutes of special instruction per week to each MGM pupil. Districts can provide the instruction through nine program options ranging from supplemental instruction within the regular classroom to participation by high school pupils in college or junior college classes. Districts may offer more than one program option. Table 10 (page 46) shows the frequency of program types we found. It indicates that the most frequent programs reported are supplemental activities for gifted pupils in regular classrooms and the least frequent programs reported are special, full-time classes arranged for gifted pupils.

TABLE 10  
TYPES OF GIFTED PROGRAMS, 1977-78†

<u>Rank</u>	<u>Program Type</u>	<u>Percent of Districts Reporting</u>
1	Supplemental Activities in Regular Classroom	92.5
2	Special Counseling, Instructional Activities or Seminars	82.5
3	Special Classes for Part of School Day	82.5
4	Advanced Grades or Classes	80.0
5	College or Junior College Classes for High School Pupils	62.5
6	Special Activities for Disadvantaged Students	60.0
7	Tutoring or Correspondence Courses	40.0
8	Special Classes for Full Day	32.5
9	Other Services or Activities (Approved in Advance by Superintendent of Public Instruction)	0

†Source: Mentally Gifted Minor Application Forms, 40 districts.

Within the various program types, we found a wide range of curriculum offerings including, for example, advanced mathematics, English composition, computer programming, music, dramatic arts and marine biology.

Districts may use a number of other programs separately or in combination with specific MGM offerings to meet needs of gifted pupils. These include (a) the Independent Study program which enables high school students to earn credit for activities in areas in which formal programs are not offered by schools,

(b) the Advanced Placement program which allows pupils to participate in accelerated coursework and is frequently operated in conjunction with MGM in secondary schools, (c) a variety of work experience programs and (d) enrollment of secondary school pupils in community colleges (i.e., through Education Code provisions which allow transfers of state apportionments).

#### THE NEED AND RATIONALE FOR PROGRAMS FOR GIFTED PUPILS

In addressing the issue of whether programs for gifted pupils are warranted, we examined information concerning the overall performance of pupils in California at high ranges of College Entrance Examination Board tests.\* A marked drop had occurred in the number of pupils scoring at high levels during the past several years. Statewide data on the most frequently taken college entrance exams--the verbal and mathematics aptitude tests--are presented in Table II (page 48). Data on each of eight achievement tests are presented in Appendix B (Table B-2). Both sets of data demonstrate a drop in the numbers of high-scoring pupils on these tests in California (and nationally).

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\*We examined College Entrance Examination Board Scholastic Aptitude Test (SAT) and achievement test data. The SAT is designed to measure a student's basic verbal and mathematical reasoning abilities. It is frequently used (along with other measures) as a criterion for college admission and a predictor of academic success in college. The achievement tests measure a student's knowledge in a range of areas and are frequently used in determining appropriate levels of college coursework.

Scores above 700 on the Scholastic Aptitude Test represented performance at approximately the 99th percentile nationwide in verbal skills and the top 97th percentile in math skills for college-bound students in 1976-77.

TABLE 11

HIGH SCORES ON SCHOLASTIC APTITUDE TEST,  
CALIFORNIA AND NATIONAL, 1971-72 AND 1976-77†

	<u>Verbal</u>		<u>Mathematics</u>	
	<u>California</u>	<u>National</u>	<u>California</u>	<u>National</u>
<u>1971-72</u>				
Scores above 700	1,735	17,560	3,983	37,067
Scores above 600	12,018	116,630	18,264	182,602
Total test-takers	91,619	1,022,820	91,595	1,022,680
<u>1976-77</u>				
Scores above 700	1,076	11,426	3,775	32,758
Scores above 600	8,493	78,342	17,353	157,466
Total test-takers	107,580	979,396	107,582	979,344

†The overall pattern reflected in the table is also found in more detailed year-to-year trend analyses.

This drop appears to be part of the pattern of decline in achievement among secondary school students generally which has occurred over the past decade.

In evaluating the State's present policy of funding "qualitatively different" programs for gifted pupils, a number of issues are relevant: the benefit of gifted education programs generally, the effectiveness of other programs with which MGM might be consolidated and the rationale for excess funding\* of programs for gifted pupils.

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\*That is, in excess of normal school support.

We conducted a comprehensive review of studies of programs for gifted pupils nationally and found that some of these programs have demonstrated benefits to pupil achievement but others have not. Programs presently implemented which have been associated with measured pupil progress include acceleration approaches involving early participation of gifted students in college coursework.\*

A wide variety of policies have been adopted nationwide for education of gifted pupils. Thus, it is important to distinguish between California's MGM program and its efficacy as an approach to educating gifted pupils and the range of alternative practices for education of the gifted.

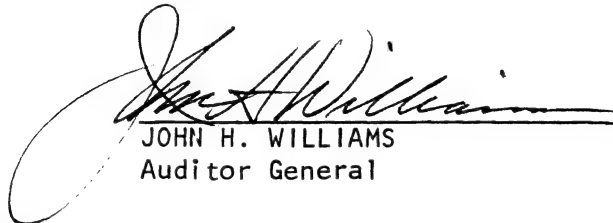
A second issue concerns the effectiveness of other programs in California with which MGM could potentially be consolidated. Sufficient data generally are not available either to determine the effectiveness of these programs (e.g., the School Improvement Program) or to project the potential impact in terms of program effectiveness of consolidating MGM with such programs.

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\*J. S. Stanley, et al (eds.), The Gifted and the Creative: A Fifty-Year Perspective, Baltimore, MD: Johns Hopkins University Press, 1977; and D. P. Keating (ed.), Intellectual Talent: Research and Development, Baltimore, MD: Johns Hopkins University Press, 1976.

Another important issue in assessing the rationale for programs for gifted pupils concerns the "excess costs" of such programs. A study conducted in California in 1967 recommended that state funding for the MGM program be \$40 per pupil for identification and \$200 for program expenses. An examination of excess costs of programs for gifted pupils was not within the scope of our audit. In view of its importance in defining state policies for gifted pupils, an analysis of this subject might be undertaken as part of planned legislative hearings on alternative policies for financing public school programs in the State.\*

Respectfully submitted,



JOHN H. WILLIAMS  
Auditor General

Date: September 29, 1978

Staff: Dr. Joan S. Bissell, Supervising Auditor  
Eugene T. Potter  
Jacques M. Barber  
Edwin H. Shepherd

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\*Such hearings have been announced by the Senate Education Committee.



STATE OF CALIFORNIA  
DEPARTMENT OF EDUCATION

STATE EDUCATION BUILDING, 721 CAPITOL MALL, SACRAMENTO 95814

September 27, 1978

Mr. John H. Williams  
Auditor General  
Joint Legislative Audit Committee  
Office of the Auditor General  
925 "L" Street, Suite 750  
Sacramento, CA 95814

Dear Mr. Williams:

This letter is written in response to the draft report prepared by your office on the recent review of the Mentally Gifted Minor (MGM) program.

I would like to commend your staff for the cooperative manner in which they worked with our staff in conducting the review.

The following comments are in response to the findings presented in your report.

Item 1: Statutory enrollment limitations have been exceeded during each of the past several years.

Response to Item 1: As pointed out by the Auditor General's report, an Attorney General's opinion in 1976 concluded that the number of gifted students participating in the MGM program exceeded the statutory maximums. The corrective action taken by the State Board of Education will, by 1980-81, result in the statutory enrollment maximums being satisfied. The State Department of Education is now in the second year of implementing the State Board's corrective action. The process is on schedule.

The State Department of Education has repeatedly proposed legislation that would have corrected the discrepancy between statutory per pupil funding levels and actual per pupil allocations. Although these legislative proposals have had the strong support of the State Board of Education, school districts and parents of gifted children and were passed by the Legislature, they all received Governor vetoes.

Item 2: Identification of pupils eligible for the program cost over \$2.3 million of state and local funds in 1976-77. Local identification expenses have exceeded state funding by almost 100 percent, and school districts paid identification costs of over \$1 million with their own funds during 1976-77 alone.

Response to Item 2: The amount to be allocated for the identification of pupils for the MGM program was last increased by the Legislature in 1971. The costs associated with conducting the identification process, specifically the cost of administering the test by a trained school psychologist and the cost of the tests, have increased markedly in the intervening seven years. School district personnel have recognized in recent years that in order to ensure that the identification has been thorough and comprehensive, additional funds must be expended by the district. Any future legislative action should address this problem by increasing the state identification allowance.

Another factor is that the Education Code limits the reimbursement of identification costs only to those students who actually meet the MGM eligibility criteria. The Department of Education has and will continue to explore and recommend pre-assessment procedures that can potentially increase the likelihood of those students nominated for testing meeting the eligibility criteria.

Item 3: A principal eligibility criterion under present statutes is general intellectual ability which is frequently measured by performance on IQ tests. Statutory eligibility standards have been difficult to implement. In addition, pupils who are high-achieving, talented in a variety of areas or from disadvantaged backgrounds and have not scored at the requisite level on IQ tests may not have the opportunity to participate in the program.

Response to Item 3: Identification is based upon all pertinent evidence as to a pupil's general intellectual and scholastic ability (Section 3820, California Administrative Code). The Education Code specifically states that scores on tests of intellectual ability and aptitude may not be the sole basis for determining the general intellectual ability of culturally disadvantaged minors (Section 52200(c), Education Code).

It should be noted, however, that state law does not authorize inclusion of children in the program who do not meet identification criteria established by state law and the State Board of Education. It is illegal to spend State MGM funds on children who are high achieving but not gifted.

Item 4: Due to excessive enrollments in the MGM program, fiscal support levels have consistently been below the legislatively prescribed per pupil minimum.

Response to Item 4: As discussed in the response to Item 1, the procedures adopted by the State Board of Education in 1976 and currently being implemented by the State Department of Education will result in the fiscal support levels being consistent with the legislatively prescribed per pupil minimum.

It is necessary to clarify information presented in the report in Table 4 on page 23. The column headed "Actual Funding Per Pupil" under "Program Activities" shows a figure of \$88.02. After adjustments in enrollment are reported by school districts (which reflect those students served by the program during second semester only) the figure will decrease by \$3 or \$4 per pupil. The final figure will be approximately \$84 to \$85.



Item 5: There are no provisions to equalize total MGM funding levels among districts. Thirty-six districts in the State had over 10 percent of their pupils enrolled in MGM during the most recent school year. Eighty-five percent of elementary districts in this group were in the upper 20 percent statewide in combined state and local guaranteed revenue.

Response to Item 5: There are no provisions to equalize funding levels because there is no authorization in law for such equalization. By legislative intent, the MGM program serves gifted children where they go to school.

Item 6: There are no provisions to adjust state MGM funding in relation to the funding which districts also receive through other categorical programs. In grades K through 3, 57 percent of students for whom districts received MGM funding in 1976-77 were pupils for whom School Improvement Program funds were also received. Within the 21 elementary districts with over 10 percent MGM enrollment, the average funding overlap was 63 percent.

Response to Item 6: There is no authority in law to adjust state MGM funding in relation to funding received by districts for other categorical programs. The Department is currently reviewing the entire range of categorical programs in order to identify any duplication in categorical funding which may exist.

Item 7: The MGM program has operated separately from other categorical programs in the State. Consequently, a relatively large proportion of program funds has been expended to support administrative and other non-teaching expenses.

Response to Item 7: Adequate administration is necessary to assure full accountability in identifying children as mentally gifted; in providing programs which do, in fact meet their advanced intellectual and creative skill development, and advanced knowledge acquisition needs; and in assuring appropriate expenditures of MGM funds allocated by the State Legislature.

California is recognized internationally and nationally as a leader in gifted child education. This has resulted not only from legislative support, but also from separately identified leadership at the state and local levels.

The Department also wishes to comment on the reference in the Auditor General's report to staff development efforts supported by a Section 404 Public Law 93-390 Grant: "Development of Teaching Competencies--Gifted and Talented" as an illustration of lack of coordination between MGM and other programs at the State and local levels.

It should be noted that the application for this project was judged one of the best applications received by the Office of Gifted and Talented in USOE. The stated purpose of the grant was to develop a high degree of expertise in teachers with specific assignments in the education of the gifted; it was never designed as a means of general staff development for all teachers. Nevertheless, workshop participants were encouraged to and did share their newly acquired knowledge and skills with other teachers in their schools and school districts; and that as a result of participation (as reported by 57% of the respondents to an administrative questionnaire),

teachers would be assuming new teaching-improvement roles or responsibilities for programs within their own schools and/or becoming district-wide resource persons.

Benefit to the total education program from workshop participation was reported by 68% of the respondents to the administrative questionnaire.

In responding to a teacher questionnaire, workshop participants showed that 52% talked informally with staff members about the gifted and talented; 30% helped colleagues plan activities for the gifted and talented; 34% encouraged other staff members to attend workshops or courses on the education of the gifted; 33% circulated material on education of the gifted; and 9% conducted workshops on Education of the Gifted for other staff members.

Item 8: The Department of Education has failed to perform adequate state-level evaluations of MGM or to provide consistent guidelines for local evaluations. The result is that information is not available to determine either the overall benefits of the MGM program or the efficacy of different program approaches for education of gifted pupils.

Response to Item 8: The Department of Education has consistently required school districts operating MGM programs to annually evaluate their MGM program. However, the focus of this evaluation requirement has intentionally been on assisting program improvement at the local level, rather than state level evaluation. The annual evaluation is necessary so that improvements in the educational programs offered gifted students can be made each year. The evaluations reflect the wide variety of MGM programs designed by the various school districts (as intended by the Legislature). The results of these program evaluations therefore do not lend themselves to neat compilation and analysis.

One of the strengths of the MGM program is that it offers different program options--suitable for different children (with different learning needs), different teachers (because of their background, training, attitudes and skills) to different schools and school districts, and to different communities.

Instead of evaluating the program to attempt to determine that one program option is more "efficacious" than another, it is more appropriate to indicate that different options meet different needs in different children. Also, certain options might be more appropriate for a given child at certain stages of his/her development or when dealing with different subject matter.

The following comments are in response to the recommendations presented in your report.

Recommendation 1: What, if any, special identification of pupils as "gifted" should occur in California's public schools as a basis for providing unique opportunities to such pupils?

Response to Recommendation 1: Current law already authorizes various means of

identifying pupils as "gifted." Identification is accomplished through a case study which is based, in part upon all pertinent evidence as to a pupil's general intellectual and scholastic ability (Section 3820, California Administrative Code). The Education Code specifically states that scores on tests of intellectual ability and aptitude may not be the sole basis for determining the general intellectual ability of culturally disadvantaged minors (Section 52200(c), Education Code).

Identification through case study procedures also provides data which are used in proper placement and in adjusting teaching strategies and learning experiences to meet the unique capabilities of individual gifted children.

Recommendation 2: If such special identification is appropriate, what criteria should be used and what can be done to ensure that such criteria are (a) fair to pupils from a range of backgrounds having a variety of talents and achievements and (b) cost-effective?

Response to Recommendation 2: Fairness criteria are already built into identification procedures outlined in Sections 3820 and 3821 of the California Administrative Code, Title 5 and in Section 52200 of Chapter 8 of Part 28 of Division 4 of Title 2 of the California Education Code. On page 14 of the Auditor General's report is a quote from Department of Education guidelines: "The identification of gifted pupils is based upon the professional review of all pertinent evidence as to the pupil's general intellectual and scholastic capacity by an identification and placement committee. No single test, test score, or other measurement shall be the determining factor in the process."

The State Department of Education is seeking more economical means of appropriately screening and identifying pupils as gifted.

Recommendation 3: What, if any, additional funding is warranted for special educational programs for gifted pupils and how should such funding fit into overall state policies regarding equitable school financing?

Response to Recommendation 3: In three of the last four years, legislation was proposed that would have met the program needs and statutorily required funding levels of all students in California who have satisfied the State MGM program eligibility criteria. All three legislative bills were strongly supported by the State Board of Education, school districts and parents of gifted children. Overwhelming support was also given by the Legislature. Although those pieces of legislation all received Governors' vetoes, the educational needs of these students still exist. The additional funding support that is necessary to provide an MGM program for these unserved gifted students is, therefore, still warranted.

Recommendation 4: Whether maintenance at the state and/or local levels of a separately administered program for gifted pupils is warranted, and what coordination is appropriate between programs for gifted pupils and other school programs?

Response to Recommendation 4: The Department believes that a separately

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administered program for gifted pupils is warranted. The findings in the Auditor General's report identify continuing issues which have been addressed by the State Board and the State Department of Education since 1970. The Department believes that these actions have done much to make the program more accountable for proper identification of children as mentally gifted minors for providing these children with learning experiences through which they can acquire higher intellectual and creative skills and advanced knowledge, and for appropriate expenditure of funds provided by the Legislature. Continuing review and analysis of these issues can certainly help to further improve the program.

The findings and recommendations from the Auditor General's review will be used by the Department of Education in our current review of the best approaches to the future funding of all educational programs.

Sincerely,



William D. Whiteneck  
Deputy Superintendent for Administration  
(916) 445-8950

WDW:sfl

cc: Donald R. McKinley  
Davis Campbell  
Ernie Lehr

APPENDIX A

Budget Data: Mentally Gifted Minor  
and Other Education Programs

TABLE A-1

BUDGET CATEGORIES OF EDUCATION FUNDS  
BY PERCENT OF EXPENDITURES,  
1976-77

Expenditure Category	Percent of Expenditures			
	MGM <u>1/</u>	ECE <u>2/</u>	EDY <u>3/</u>	General Fund <u>4/</u>
Salaries				
Certificated Salaries	(45)	(21)	(39)	(57)
Classified Salaries	(12)	(57)	(39)	(17)
Total Salaries	57%	78%	78%	74%
Employee Benefits	11	8	11	11
Books, Supplies & Equipment	21	9	7	6
Contracted Services	9	3	2	6
Capital Outlay	2	1	1	3
Indirect Costs	- <u>5/</u>	1	1	- <u>5/</u>
Totals	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

1/ Based on budgeted 1977-78 expenditures. Although these data appear to be inconsistent with Table 6 (page 33), this is not the case. The data above combine direct costs and support costs (e.g., salary expenditures included as both "direct costs" and "direct support" in Table 6 are combined under "salaries" above).

2/ Early Childhood Education--School Improvement Program beginning 1977-78.

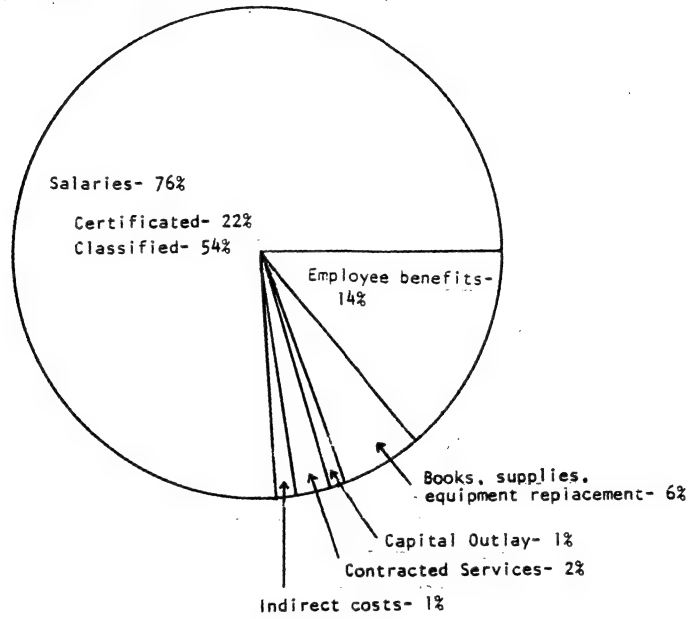
3/ Educationally Disadvantaged Youth.

4/ Current expense of education, all California school districts (not simply state General Fund expenditures).

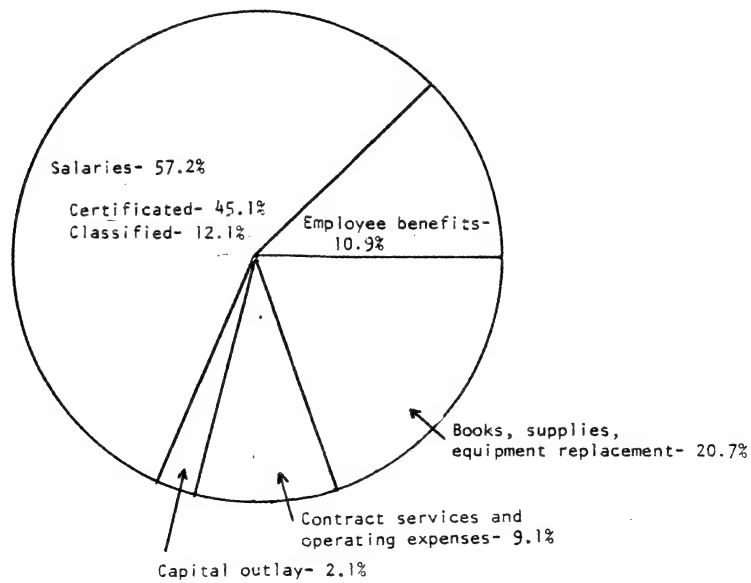
5/ Budget categories reflected in table do not include separate reporting for indirect costs. Actual expenditure data indicate indirect support costs for the MGM program of approximately four percent.

# CHART A-1

Consolidated Application Funds, 1976-77



Mentally Gifted Minors Budgeted Expenditures, 1977-78



APPENDIX B

College Entrance Examination Board Test Data



TABLE B-1

COLLEGE ENTRANCE EXAMINATION BOARD  
ADVANCED PLACEMENT SCORES, 1977ENGLISH

<u>Score</u>	<u>MGM Pupils</u>		<u>Non-MGM Pupils</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Passing (3+)*	698	84.1	403	63.6
Not Passing (2-)**	<u>132</u>	<u>15.9</u>	<u>231</u>	<u>36.4</u>
	<u>830</u>	<u>100.0</u>	<u>634</u>	<u>100.0</u>

AMERICAN HISTORY

Passing (3+)	690	76.0	376	59.6
Not Passing (2-)	<u>218</u>	<u>24.0</u>	<u>255</u>	<u>40.4</u>
	<u>908</u>	<u>100.0</u>	<u>631</u>	<u>100.0</u>

MATHEMATICS (Calculus)

Passing (3+)	464	85.8	324	77.7
Not Passing (2-)	<u>77</u>	<u>14.2</u>	<u>93</u>	<u>22.3</u>
	<u>541</u>	<u>100.0</u>	<u>417</u>	<u>100.0</u>

CHEMISTRY

Passing (3+)	208	86.0	136	81.0
Not Passing (2-)	<u>54</u>	<u>14.0</u>	<u>32</u>	<u>19.0</u>
	<u>242</u>	<u>100.0</u>	<u>168</u>	<u>100.0</u>

\*A score of 3 or more.

\*\*A score of 2 or less.

TABLE B-1 (cont'd)

BIOLOGY

<u>Score</u>	<u>MGM Pupils</u>		<u>Non-MGM Pupils</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Passing (3+)	290	95.1	121	78.6
Not Passing (2-)	<u>15</u>	<u>4.9</u>	<u>33</u>	<u>21.4</u>
	<u>305</u>	<u>100.0</u>	<u>154</u>	<u>100.0</u>

SPANISH

Passing (3+)	86	70.5	120	85.1
Not Passing (2-)	<u>36</u>	<u>29.5</u>	<u>21</u>	<u>14.9</u>
	<u>122</u>	<u>100.0</u>	<u>141</u>	<u>100.0</u>

PHYSICS

Passing (3+)	210	88.2	109	84.5
Not Passing (2-)	<u>28</u>	<u>11.8</u>	<u>20</u>	<u>15.5</u>
	<u>238</u>	<u>100.0</u>	<u>129</u>	<u>100.0</u>

EUROPEAN HISTORY

Passing (3+)	85	93.4	78	75.0
Not Passing (2-)	<u>6</u>	<u>6.6</u>	<u>26</u>	<u>25.0</u>
	<u>91</u>	<u>100.0</u>	<u>104</u>	<u>100.0</u>

FRENCH

Passing (3+)	72	74.2	57	59.4
Not Passing (2-)	<u>25</u>	<u>25.8</u>	<u>39</u>	<u>40.6</u>
	<u>97</u>	<u>100.0</u>	<u>96</u>	<u>100.0</u>

TABLE B-j (cont'd)

ART

<u>Score</u>	<u>MGM Pupils</u>		<u>Non-MGM Pupils</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Passing (3+)	15	100	31	86.1
Not Passing (2-)	<u>0</u>	<u>0</u>	<u>5</u>	<u>13.9</u>
	<u>15</u>	<u>100</u>	<u>36</u>	<u>100.0</u>

GERMAN

Passing (3+)	11	78.6	18	69.2
Not Passing (2-)	<u>3</u>	<u>21.4</u>	<u>8</u>	<u>30.8</u>
	<u>14</u>	<u>100.0</u>	<u>26</u>	<u>100.0</u>

MUSIC

Passing (3+)	8	100	6	75.0
Not Passing (2-)	<u>0</u>	<u>0</u>	<u>2</u>	<u>25.0</u>
	<u>8</u>	<u>100</u>	<u>8</u>	<u>100.0</u>

CLASSICS

Passing (3+)	12	85.7	4	57.1
Not Passing (2-)	<u>2</u>	<u>14.3</u>	<u>3</u>	<u>42.9</u>
	<u>14</u>	<u>100.0</u>	<u>7</u>	<u>100.0</u>

TABLE B-2

COLLEGE ENTRANCE EXAMINATION BOARD  
HIGH ACHIEVEMENT TEST SCORE DATA  
CALIFORNIA AND NATIONAL, 1971-72 and 1976-77

Scores	English Composition			Mathematics Level 1			American History			Spanish		
	California	No.	%	California	No.	%	California	No.	%	California	No.	%
1971-72												
Scores above 700	1,750	16,739	5.3	1,982	17,580	7.3	789	4,378	4.1	720	3,894	11.5
Scores above 600	8,766	78,161	25.0	7,817	73,162	30.5	3,322	17,397	16.5	1,731	9,485	28.1
Total test-takers	32,139	313,158		22,840	240,089		22,170	105,448		3,920	33,807	
1976-77												
Scores above 700	1,011	9,374	4.7	1,252	11,438	7.6	419	2,139	3.4	679	3,481	14.4
Scores above 600	6,193	48,200	24.0	5,813	47,860	31.9	2,407	10,655	16.9	1,497	7,355	30.3
Total test-takers	29,135	200,539		19,423	149,918		19,875	63,111		4,831	24,238	
Scores	Mathematics Level 2			French			Biology			Chemistry		
	California	No.	%	California	No.	%	California	No.	%	California	No.	%
1971-72												
Scores above 700	1,414	11,859	40.4	1,364	4,788	9.2	391	4,782	9.3	Not Available	6,868	14.3
Scores above 600	2,500	22,914	78.1	1,036	15,267	29.4	1,644	15,953	31.1		18,514	38.8
Total test-takers	3,065	29,334		2,948	51,991		6,451	51,371			47,759	
1976-77												
Scores above 700	1,769	12,615	41.4	270	3,256	11.9	371	4,714	10.5	363	4,683	13.4
Scores above 600	3,378	24,054	78.9	766	9,642	35.3	1,537	15,335	34.2	884	14,886	42.5
Total test-takers	4,190	30,497		2,593	27,298		6,472	44,897		1,734	35,009	

1/ Math Level 2 figures were not available for 1971-72, 1972-73, 1973-74. Therefore 1974-75 figures were used.

cc: Members of the Legislature  
Office of the Governor  
Office of the Lieutenant Governor  
Secretary of State  
State Controller  
State Treasurer  
Legislative Analyst  
Director of Finance  
Assembly Office of Research  
Senate Office of Research  
Assembly Majority/Minority Consultants  
Senate Majority/Minority Consultants  
California State Department Heads  
Capitol Press Corps